Yi 2
7397
F 14

15

Dreams cont'

Aliment 585

Hunger 615

(k) From what has been said of the partial easement or waking state of one faculty, while Others are asleep we may understand the reason why we are able to wake at any hour we please. This is most Observable When we are about getting Off on our Journey at an earlier hour than our usual one of rising. It is owing to the memory being kept from falling a sleep by our strong desire to wake at the wished for hour. We have likewise from the history of Dreams that has been given why some persons compose poems, and run reasons in their sleep. It is owing to the wakeful state of the Understanding, with a small portion of the memory — when verses are composed — the memory is awake only for words. — go to p 568 v o

a person who is awake, but depri=
=ved of the use of some of his faculties
by disease. — How differently does the
understanding alone operate in a dream,
to what it does in a person who
is bereft of every rational faculty
except the understanding — by an
attack of the palsy? — How diffe=
=rently too does the memory act in
a Dream, — to what it does in the
waking state! — In a Dream for instance
of every thing that relates to a departed
friend — whom we see in a dream,
without once recollecting that
he has been dead perhaps for months
or years. — This shews irregularity

~~The~~ But further - How differently do we judge of right and wrong, ~~and~~ and how differently do we act with respect to certain moral obligations in dreams. from what we do in a waking state. How often do we Chastity perpetrate Offences against delicacy, and other virtues at which we in a dream should have shuddered when awake! This depends upon the total Sleep of the seat of while the rational faculties are inactive it may depend or upon their acting in an irregular & convulsive manner. —

= Hud to its concentration in the Dreaming faculty or part of the brain.

Dreaming I ~~said~~ have said ~~that~~ Dreams are incoherent, hence we derive an argument in favor of the truth of the Dreams recorded in the OD & new testament. They are all incoherent, and all

as well as partial excitement
of motion evidently to take place in
those spots of the brain which are
the Seats of the different faculties of
the mind. In the case that has been mentioned
it shews the memory to be but partially excited. It recollects
the sounds, but forgets his death. It is remarkable that
it is very
the images of things which are presented
fancy
to the imagination are much more
vivid in dreams than in the
waking State. — This is owing to an abstraction of excitement
all external impression (from the senses)
from the Seats of the other faculties
of the Mind. = And may it not be owing
= to the greater increase of strength
in the arterial system in a fever,
from an Abstraction of Strength from all

require Divine interpretation to understand them. They were unintelligible even to the persons who dreamt them.

It is equally remarkable that the Will acts with more force in Dreams than in the waking state, and probably from the same cause of abstraction of the faculties of the mind. ‡ This preternatural force of the Will appears in its producing semi-nal emissions in our sleeps. No such power has ever been exercised over the seminal Vesicles in the waking state. ‡ This is obvious to common observation. The desire and attempt to urinate awakens the sleeper. Nothing more occurs in this increase of the action or force of one faculty by the Quiescence of another — than what happens in the Senses — The loss or suspension of one of them is always followed by an accumulation of force in others.

go on top p. 578

‡ Stewart the famous pedestrian traveller never dreamt after he began to live wholly on vegetables.

~~the bodies of the body~~ memory

Objection: more active facts from 14.

Do we dream always? — This

is an important question, and leads

us to ~~the~~ an important inquiry, that is

the ~~question~~ of the

Sleep of Soul. It is certain ~~from~~

that laboring

~~people do not dream at all.~~

people who sleep soundly dream but

little, and that many people do

not dream at all. Mr Locke tells

us one instance of this kind, and

I know another in a young woman

of 30 years of age in this city. From these

facts Mr Locke infers that the Soul sleeps

with the body when we do not dream,

- for to what purpose, says he, should we spend

whole nights in thinking, and derive no

or advantage
fruit from our
this we are told
the thoughts of
their lives, and that
so few, and desire
from their waking
might as well be
=out Consciousness,
waking state. —
Objection I shall
admit
that Children
before they are
the whole of that
in learning a
=nection between
or words. —

thoughts? In answer to
that children lose all
the first three years of
their many people retain
so little advantage
from their waking thoughts, that they
might as well be spent in sleep with=
=out consciousness, as be wasted in this
waking state. — In answer to the first
Objection I shall observe, that I do not
admit that children have any thoughts to waste
before they are three years old, for
the whole of that time is employed
in learning a language, or connection
=nection between substances & signs
or words. — As to the 2nd Objection,
it has no force — If men waste

v mechanical impressions only not mental

analogues to Voice & Speech —

their thoughts, it is no fault in the mi=
=nd Almighty, for over wise Creator ne=
=ver made any thing - not even a thought
to be wasted, or employed unprofitably
upon any Subject. — Sometimes
I believe that we ~~frequently~~ dream
~~I should have~~ been glad to have
without a consciousness of it the next
day. This is owing to the perfectly
sleeping state of the memory which
leaves the chaos of thoughts yt have
been excited in the night to perish
in the ~~tumult of~~ But could
the brain. I should
as soon believe that an imperceptible
fibre ~~was absolute~~ always existed in the blood vessels
that unconscious thoughts existed constantly in a healthy
state. V I should have been glad of

V If dreams were not morbid in nature
it would call in question the perfection
of the human body in its original
State — I should be disposed to say with
the poet if this — Dreams were
essential to our existence — how blest
are they who wake no more —
— not so — if Dreams infest the grave.
for 9 out of 10 of them are sources of
V misery to us — It is remarkable that Dreams
are most common in the decline of life when
sleep is rendered unsound from the
numerous infirmities of old age for
old people
— & babes dream a great deal they are
common likewise in fevers where sleep is imperfect

the aid of the perpetual stimulus of the
thinking faculties in ammuting for
the continuance of animal life in
sleep — but I could not be introduce
them consistently with the Objections w:
I have made to the operations of the
mind going forward in healthy sleep
I conclude therefore with M Locke,
that the Soul sleeps with the body in
perfect health — & that Dreams are
always — morbid phenomena in the
This will readily be admitted if we believe that
system — I could as soon believe
to be the effect of Organization of the brain
that a Fever was
the circulation
perpetual
stimulus of unconscious thoughts
to keep up animal life
necessary to keep up
of the blood, as the
V

It has been observed that ~~the truth of~~ It is unaccountable, we are able to wake at any hour we please in the morning. How shall we account for this? — Why by admitting the memory to be so much excited by our desire to remember the hour of waking or going to bed, that it does not sink into sleep during the night. — The Understanding likewise is often nearly lost — witness connected dreams - poetry made in dreams [my own line]

Dreams may be resumed when we wish it by retaining the same position of our bodies & head in bed in which they first occurred.

The Oblivion of our Dreams may be prevented by keeping our eyes shut for some time after we awake. They are often best remembered when we wake gradually

In certain diseases are mistaken for Blackburn. many people for Insanity!

a States of the mind, Dreams Realities. see D'Lussie. thus lose y Charactis & Bourdinot - Le

The certainty of Dreams depends much on
~~Dreams are much influenced by~~
~~exter the~~ the nature of certain stimuli
~~circumstances~~ a full or an empty stomach
upon the body [a full bladder] - and the
a great influence in producing Dreams -
morning twilight likewise frequently produces
them - hence we Dream most frequently
about day light. ~~It is difficult to~~
~~conceive of~~ In short there is scarcely
any stimulus external or internal
that will not produce a Dream in
habits rendered visitable by the com-
-mon modes of life among civilized
nations. V

The specific nature of Dreams is
~~much influenced~~ in part by the nature of the
stimuli which are applied to the
body. In an empty ~~state~~ produces Hunger

by a mischievous boy

V The stimulus of a pin in the back of
pious ~~Clergyman~~ Minister of the Gospel
a ~~Methodist preacher~~ made him cry out
in his sleep - "Oh!! now I know what St.
Paul meant by a thorn in the flesh."

+ ~~But~~ Dreams are influenced further by ~~association~~
relationship the subjects which have previously occupied
the mind, altho they do not appear to be related to
each other. — Of this there are proofs in the
experience of every body. By ingenuity we shall find
they all related by former associations.

Dreams are most connected, with Low we
hold Conversations
~~Dream of talking~~ in them, Language
denots the rapidity & irregularity of our
thoughts. It is probably because Brutes
have no language that they are unable
to reason. Their inability to reason I
said constituted the principal difference be-
-tween their minds, & the minds of the human
species. — [Reasonable creatures - we rational only]
In we dreaming of fighting we often

Dreams about eating. & a moderate degree of cold produces dreams of more intense sufferings from it. But this connection between dreams and certain impressions made upon the senses is happily illustrated by an anecdote in Dr Beatties works. He tells us of a young officer who went thro' all the forms of a duel in consequence of certain ideas excited in his mind by whispering in his ear. He awoke at last from the explosion of a pistol which had been put into his hand by [illegible] who believed he had fired at his antagonist.

But there are not only morbid or irregular in our sleep, but certain morbid or preternatural excessive motion in certain parts of the Brain determining an influx into

raise ones fists, or feet to strike or kick ones
Antagonists. In Dreaming of making waters - the
will often stimulates the bladder in children
so as to cause them to wet their beds. It is not so in
advanced life, or in old age - because the muscles of the
bladder become too rigid for the will to move in sleep.

V Talking in our Sleep is often connected
with the waking state of the sense of hearing,
and hence we may hold a conversation with
such persons, and obtain from them a knowledge
of all the secret transactions of their lives.
This would not not be the case - if their
eyes were open - or if they had the use of
their understanding — hence you see a
new argument in favor of the subserviency
of the different senses & faculties of the
mind to each other.

+ This was done in this
similar case recorded
Heroes - of a woman
a knowledge of her
He was in confession
being in
B 581. V
city to a Lady a
by Hermiens de
who thus obtained
husband's secrets.
of what he said first
Day.

the muscles or limbs which are called
into action in sleep. — These actions con-
=sist in talking & walking in our sleep,
and in performing many other actions of volun-
=tary motion. V

Facts are related of the exploits performed
by the sommum bulæ as they are called or
by persons who walk in their sleep. —
The story of the young man related in the
memoirs of the French Academy who com-
pose an oration in his sleep in a single
night is too well attested to be doubted. Dr
Haller assumes us that he wrote Verses in
his sleep. The late Rev D Blacklock of
Sophia's Dirg[illegible] the blind poet & philo-
rose from his bed to which he had retired
soon after Dinner — came down stairs —
sat down at table & supped with his family

performances

+ The Bolgain — One of the finest poems in
The celebrated, but unfortunate
the poems of Mrs Robinson is read to be
the "Israniac". It originated the bad room
I saw
a deranged man the day before
in the Streets of Bristol, known by the
name of "mad Lemary". The afterwards
took a dose of Opium, & in the partial
excitement of his mind, dictated to his
Daughter that incomparable poem en=
=titled "the Maniac"! The next day he
had no knowledge or recollection of that
what he had done elegant performance.

crossed with them would ~~invent~~ to discover
~~to~~ ~~to~~ the cause of it
-sense, and finally entered the cause of it
a pleasant Jong. all this being Done,
he suddenly started up, and to the surprise
of the company discovered that he knew
not ~~what~~ what he had been doing, and
that he had been asleep during the whole
time that he had passed with them. +

Again —

~~It is very remarkable that~~ These
Somnambuli prove remember a single
thing they do in their Sleep after they
awake - but it is still more remarkable
that they remember in each fit of
right walking, every thing they did the
right before. This has been inferred
from the exact order with which they
this Undertakings or preternatural, or

I shall hereafter mention a
Case of a Lady exactly similar
to the one I have read — induced
by derangement.

had no
~~what she had~~

I have been much puzzled to ~~invent~~
discover
~~a single conjecture~~ the cause of
this wonderful phenomenon in the operations
of the human mind, nor should I have
~~attempted to explain it~~
~~ceased to deliver one~~, had I not met
with the following curious history of a
case in Connecticut in a letter from
late
Dr Lathrop of Springfield, to the Rev^d Dr
late
Stiles President of Yale College at New Haven.
This case
~~letter~~ I hope will furnish me with at least
string
one ~~link~~ of a clue to guide me into the
~~explanation~~ knowledge of the cause
of this singular fact.

The motions in the somnambuli and
in this patient appear indeed as if they
depended on two minds, but they may
be explained by supposing that they
were derived from preternatural, or

V Persons who talk in their sleep
talk common sense & Dreams.

Darwin.

~~exupsive~~ motions of different spots
of the brain inhabited by once the
same mind. V

You recollect I said formerly that
every act of memory was produced by
a repetition of motions in the brain
exactly the same in degree & situation
which first produced the idea or thought
which is the object of memory.
may not
the reason why the actions performed
in sleep, and in the purveyions of the
not
disorder I have described, are ~~be~~ ~~unable~~
a sufficient
remembered is because force of im-
not
=pression is applied to excite the
Ideas which have been lost? or if
to excite them perhaps
a sufficient force be applied, ~~it is not~~
may it not be
directed to the a part of the brain wh

when cured frequently

V Madmen remember nothing of what they

passed when they were deranged, but when

they relapse, - they generally return to the

former Subjects of derangement E.g: a man

in the hospital Who tho' himself an ad-

when he relapsed resumed all his naval habits & Spunkes,

=mirals & drunkards forget

they do when drunk. They

=member what they do, in the probably they re-

fitt. The reason why we next remember

things sometimes is owing to excitement &

=vation beyond or below the idea lost, first

produced; hence it occurs when we are not

seeking for it. Kempfer says that he

was once intoxicated at a table in

Persia by partaking of a Substance called

Peganum which produced transports hereon

felt before - but he forgot them all the next day.

melancholly from one Cause often arises

is not the seat of that part of the Memory
from whence the Actions or ideas that
are forgotten, were derived?
upon the subject of Latent Memory
I shall B mention two facts which
will throw some light upon this subject.
D. The remembrance
of the Elements of Local
of the welch language was excited by
a fever - and of my Companion, whom
the remembrance of
I left Edinr formerly spoke
Brown in Edinr of the french language,
was awakened
by a fitt of Drunkenness. In both these
cases memory was excited by a new de
powerful force, acting or quiescent upon a long passive
part of the brain. —

The returns or thoughts which are forgotten
in Locomotion
partake of the Analogy of the Imagina-
-tion and the Venereal Appetite,

from continuity of motion the distress
from a former cause. Miss P. Stocker.

– here we find in religious people
that grief from the loss of a friend, relation or
often revives the anguish of & or the
painful sense of guilt & the repentance which
characterized the commencement
of their religious habits].

they will certainly be excited by an ~~unusual~~ ~~unnatural~~ unusual and preternatural force, and that too proportioned to the quiescence of other faculties of the mind, & other parts of the brain.

It is no more wonderful to me than y: somnambuli cannot recall the thots and Actions of the night, without relapsing to the situation they were in when they first occurred, than y: we cannot recall the vivid impressions of the imagination, or the powerful stimulus of the will on the Seminal vesicles which occur in a Dream in our waking State. They can only be recalled by the same force, acting in a Dream upon the ~~Dream which first~~ same part of the brain]: ——

~~It is remarkable that Some of the~~

None of
Actions performed by the somnabuli du=
=ring sleep fatigue them. This shews that they
depend on preternatural or excessive
excitement in the brain. We are
never fatigued by the actions we perform
in the waking state while we are exhila=
=ted by the stimulus of pleasant passions,
or cordial drinks.

I would remark further that those motions
in the brain in somnambuli appear to
differ from those which occur in com=
=mon dreams by being excessive but regu=
=lar - Those in common dreams are
irregular and both excessive & deficient
in force according as the excitement
of the brain is above or below the
sleeping point. — They resemble the
excessive action of the Arterial system

V There is one more fact with res:
=pect to Dreams which remains to
be explained, and that is why we
so seldom Dream of persons who
are most dear to us. Lovers Dream
of each other only in y^e beginning
or declension of the pasion of
Love. The late M^rs R: informed
me that he was 7 years under
the influence of a strong Attachm^t
to a Lady, during all which time
he never Once dreamed of her.
~~Intimate friends & Relations~~
The reason of this fact, I sus:
=pose to be, that the imagina=
=tion, and

~~the blood~~ ~~in the Arteries of the Dangers~~, after exercise
=pand with its expansive & irregular
action in a fever. V

After the explanation of the cause
of Dreams which I have given, I need not
detain you to prove that they have in
ordinary cases no connection with the su=
=pernatural influence. It would be
strange if a premonition of the
breaking of a creaking,
should be given in a dream to the
~~or the pleasure of a Lord to~~
mistress or maid of a family, and
of armies
~~from~~ Generals and other important men=
=bers of Society be left without the least be=
=nefit from them, in the most difficult
conjunctures of human affairs.
Where Dreams & events have agreed,
in 99 cases out of 200, I would ascribe

Memory are so worn down by
constantly thinking of the beloved
Object during the day, that no ex-
= citement or excited are left
in those parts of the brain in
which Memory & Imagin^n are seated,
for the Idea of the beloved Object
to act upon. For the same reason
friends when deprived cannot recal
each others faces. The paralysis weakens
here only in Imagin^n not in the memory. =

582.

= Dreams & actions in Dreams are
not confined to the human species.
We observe them in Dogs & horses.
The former bark & the latter
neigh in their sleep. Cows low in
their sleep after losing their calves,
and bulls & rams are said to
discover strong marks of being
agitated by Dreams during the
period in which they feel the
impulse of Venereal desires.

it to the same accidental Coincidence
which takes place between ~~—~~ events
and our waking thoughts. But let me
close altogether ~~an accident~~ Channel this which has
not ~~limits to~~ the Supreme Being
~~has provided~~ has in extraordinary
cases even in modern times acted on
the human mind. It is not my business
to determine when those cases occur, but
a man must renounce his powers of judging
and believing, who rejects them in all
~~Possible~~ cases whatever. ~~+~~

~~I~~. The business of a physician is to dis-
-cover ~~not~~ what is now — not what is to come
from ~~Dreams~~ Dreams? when they are more frequent
more distressing — or more terrifying
than usual, they indicate an incipient
Disease, and of course should suggest to
~~the subject of them, to~~ the Physician

Drams in Phenicula ~~is~~ indicate tonic action - They are tensor &c — In Hysteria - direct debility - They are [bar &c] —

further
V It serves to equalise the ex-
=citement of the system. It does
this by collecting all its scattered
~~frequent~~ fragments first into the
blood Vessels, from where it is
afterwards dispersed to every part of the body.
The recumbent posture of the body
favours the equable distribution
of excitement, hence we find

~~the~~ necessity of temperance - exercise - ~~or~~
evacuations, or other medicines, ~~to prevent~~ and
thereby to strangle a disease before it is
~~that disease formed being~~
completely formed. D

I need hardly mention the final cause
or use of Sleep. It has been emphatically
called "Tired nature's sweet restorer" by One
of the poets - It renews every day our
capacities, and sensations of pleasure; &
imparts every night a sweet oblivion
of many of the pains and ~~woes~~ of all the
cares of life. The happy & the miserable
are therefore alike indebted to it. V

I ~~have~~ mentioned the use of
Dreams formerly in speaking of the
things which produced amongst life. They
~~were~~ exist in those habits, and

v They serve further (says Darwin) to diminish the excitability accumulated in sleep, and thereby to prevent Delirium in waking from the first impression of Stimuli upon the senses.

Here Gent: we take leave for a while of the faculties & operations of the mind. Say not I have puzzled you with theories upon this subject. I have delivered little else but a history of facts & operations in describing the various faculties & operations of the mind. Permit me to recommend further inquiries into each of them in your future Studies. I will not say that every disease is a compound of body & mind, but I will say, there is scarcely a disease in which to your a knowledge great advantages will not arise, & even studying the laws of the mind and that those Physicians will always be most successful in curing the diseases who are practically in the habit of considering the Friend as a Channel thro which

in those states of the system in which they are most necessary — that is where there is the greatest ~~the~~ necessity or absence of ~~other~~ the other stimuli ~~of~~ which support animal life during ~~sleep~~ the ~~suspension~~ exercise of ~~the involuntary functions~~ — to indicate the presence or approach of many diseases. V

Lect: 23d Jan.y 25th 1792.

It is some time since I have mentioned my Guide in my present researches into the Oeconomy of the human body, but I have not forgotten him. After having been conducted by him thro' the many intricate paths of animal life — of the Senses & of the faculties & Operations of the Mind, ~~and of the passions~~ I have ~~measured~~ which succeeded ~~that~~ those

they convey this Remedies to the body.

pain of all kinds, more especially when it affects the stomach or bowels, is much relieved by laying down. Even the pain of the tooth ache is mitigated by this position of the body. It by relaxing them the muscles in a state to receive excitement. ‡ They

‡ go to p. 614 - living in Abominations Under Hygeia.

~~subjects, I proceeded that I~~ ~~to~~ ~~had~~ ~~to claim that he~~ upon frequently of blood, Lymph, Alimentation - Digestion - ~~Respiration~~ Secretion & excretion ~~and begged to be~~ informed what he meant by them. He readily consented to instruct me in the Nature of Alliments & of each of those animal functions; and I shall now lay before the information which I sought & received from him. It remains now that I deliver the physiology of each of those subjects. I shall begin by ~~detailing the history~~ making a few remarks upon Alliment. Jan.y 27. 1792

X This is of two kinds — Viz: Animal and Vegetable; both of which were intended for the support & use of man. — This I infer from the

Before I proceed to ~~the history of Aliments~~ mention them
it will be nuspary to take notice ~~of~~
of the opinion of some modern Phi-
-losophers who have taken great
pains to describe the gradual man-
-ner in which man discovered
under the influence of his Reason
the aliments which were proper
for his support. They tell us
he first fed upon herbs - then
upon the fruits of trees - then upon
roots discovered by the accidental
openings in the earth - lastly
upon grains. discovered in like
manner by with roots by
an accident. They tell us
further that he as man

V by divine ~~visions~~ Revelation
in the manner of preparing
his Aliment by means of fire
so as to render it more pleasant
& nutritious, and that without
Revelation — he ~~would~~ & his posterity
would have been as deficient
in the knowledge of Cookery as
~~were~~ the brute creation. —

In a word — not only was the
existence of GOD, and all
things, was derived from Revelation, but
~~all~~ the Seeds or elements of all human
knowledge - particularly Language -
Horticulture - Agriculture - Shipbuilding,
and all the common mechanic Arts,
were derived from the same source..
as from the 24 Letters of the

acquired his first relish for animal
knowledge of
food by a forrest burning his fingers
from
in turning a piece of flesh ~~that~~
while it
~~that~~ was offering up a sacrifice
upon an altar, & then thrusting
his fingers into his mouth.
as absurd as ~~this~~.

These opinions are all hypothetical
they are absurd.

— The different kinds of Aliments
proper for the nourishment of
the human body I believe were
pointed out to man immediately
after the his Creation by a Revelation
— & without it, I believe he
would have perished, with famine
or destroyed himself by poisonous
products of the earth. I believe
further — that as he was instructed

Alphabet, we have been ena-
=bled to compose ~~all~~ a hundred different languages,
so from the seeds or elements
of a few original communications
by Revelation - all the discoveries
in arts & Sciences have been
=ted, by means of the genius
or reasoning powers of men,
what is called
or by means of accident,
which may be considered as
a subordinate species of Revelation.
With the same Absurd Effrontery that the
modern pagan philosophers - suppose we advanced
from a wild state of nature to our present kind of
Civilment, they suppose man advanced from a
Savage to a Civilized State - now the reverse of
this is true. Man was created a civilized
being & the first Communities of men were
civilized. They became Savages from the loss of
two things principally - Religion & letters. This
Degeneracy is easy and common and hence

2 From the example of our saviour
2 ~~By~~ K who partook both of fish, and
of Land animals in his diet.

Structure of his teeth, and of the ali=
=mentary Canal – both of which are
formed upon the compound principles
of carnivorous & granivorous Ani=
=mals. 2 from a diet consisting of
either of them seperately, frequently producing bad
health, 3 from the use of both
being not only permitted, but enjoined
by a positive Command both in
the Old & new testament. Let us
not suppose that there is any cruelty
in heaven in permitting
the life of one Animal to be suppor=
=ted by the death of another. Far
from it – The Command to Peter
This prompt – to slay &
eat" like every other Divine Comm=
=mand

— from p: 588 —

V But again — the destruction of animals by the knife or in any other way prevents the long protracted Death from disease, such as we shall say hereafter p: 4: ^ sorrows of old age among them, ^ likewise prevents for in this helpless situation, they have can have no help like man from affectionate or interested relations or friends. From ~~fish, birds~~ ~~human~~ ~~such other species that live on land because~~ ~~they get what to eat from the air or from water~~ ~~and~~ the ignorance of dumb animals, they suffer nothing from the dread of death. Hence the destruction of them by the knife is attended with no mental anguish. They feel in parting with life only a momentary bodily pain. —— go on to V p: 588

is the effect of unflowing Goodness, for
by the constant Destruction of every Animals
which supplies us with food, room is
given for the existence of a thousand
more of the same Species who come
forward and partake of the blessing
of life. - It is by the destruction of
Animals for food, that the various
Species of them have been preserved a-
-live to this day, for had not this
increase thus limited been unchecked in the
imperfect & partial
present state of cultivation of our
earth, they must have all pe-
rished from the want of subsistence
long ago. To all the domestic
While these
Animals have existed
within the last 100 years above, are taken

= They are probably ignorant of
the nature of death - hence the
Hare which is exposed most frequently
to it of any wild Animal from the
number of its enemies, is the
most playful of all Animals.
~~and this ignorance arises from~~
~~the want of reason to draw inferences~~
~~from the Death of other Animals so~~
~~as to apply it to themselves.~~ This
ignorance arises from the
Want of reason to draw inferences
from the Death of other Animals so
as to apply it to themselves. Hence
the words of Pope are as truly
philosophical, as they are poetical
"The Lamb &c. Even while
Animals are dying, they are not
conscious that their pains, are
a previous step to the loss of their
Existence. ~~go to p. 588~~

I proceed further to remark

[turn back to p: 58.]

V In a more cultivated state of
the earth, [and in a more improved
state of morals and particularly
of humanity] it is probable, animals
compose
will cease to be part of the food
of man, but Until this and that
the products of agriculture will be
so numerous & abundant as to
afford ample Subsistance to all the
tenants of the globe without obliging
them to feast upon each other. It
is supposed This change from animal,
to a diet wholly vegetable, will
probably coöperate in producing
& peaceful
that mild temper of which is
the prophesies of the Old Testament

account,
~~or~~ into our ~~Calculation~~ - the num-
-ber of them almost exceeds calcula-
-tion, - and yet not one of these
would have ever seen the sun - or
animal or vegetable
partaken of those pleasures ~~of~~ w.
they enjoy in a much higher degree than the human species
ch. w. constitute with them ~~psychology~~ a
degree of happiness proportioned to
the absence of other pleasures, Unless
the Ancestors of these animals had
composed
~~constituted~~ part of the food of man.
go to p: 587.
~~I must further to remark, that~~
It belongs to the Materia Medica to
point out the different modes of pre-
-paring animal food, and to mention
ch
the most common animals w.
this food. But it will not be foreign
to my purpose to say a few words
afford it. I should only remark that
~~There is not a single Quadruped~~

~~a~~ppear as will take place in the
reign of the prince of peace upon
our Earth. Some late travellers ~~into~~
~~the interior parts of Africa~~ tell us
that the vegetable productions of the
earth are so luxuriant in the interior parts of Africa that
the wild Beasts live upon them, &
that it is no uncommon thing for
parents to order their Children to
drive the Lyons from their barn
yards to prevent their eating up
all the straw which they allot for
for this domestic Animals. ~~In~~ That
~~this~~ we see the beginning of ~~those~~
peace and ~~happiness~~ order ~~which~~ ~~that~~
~~happy days which~~
~~our Globe~~ which we are told are
to succeed the past & present state of
~~the~~ war & confusion in every part of
our World! —

~~X~~bird - fish - insect - worm - or
serpent that exists, that has not
only furnished food, - but a luxury
in some age or country of the world.
- Let this teach us to bear with certain
animals which have been supposed
to be interlopers or intruders upon
our globe. They were all intended
for the benefit of man or of other
animals. Perhaps the worship of
some of the most loathsome & contemp-
=tible animals which we read of
~~have been~~ the objects of
divine honours in some countries,
may have been permitted by provi=
-dence only to preserve this species
from extinction for the benefit

V Bring in from p: 9 or 1 - to 25 of lectures on domestic Oeconomy. ad X

[Animal food is wild & domestic -
The wild most easy of Digestion.
Its qualities are much influenced by its mode of preparation. These are / soops - w changes nourishing in
2 boild. 3 roasted fryed 5 boiled -
Prepared by
6 salted, 7 smoked - 8 ~~poisoned~~ in
molapses - or sugar 9 dried in the hot
sun. 10 by frost. -
Fish intermediate between
animal & veg: food in point of nour=
=ishment.

of man, for it is thus in a thousand
instances that our benevolent Creator,
overrules
directs the ignorance - the idolatry
all the
and follies of mankind in such a
manner as to render them subser-
-vient in different situations, or in
succesive generations to the general
and durable happiness of his creatures.
We come now to treat of
Whole nations have lived on Ani-
-mal food alone. But they seldom en-
-joy perfect health or long life. I shall
mention the diseases of an animal diet
a/ to eggs first + turnover
apoplexy. Vegetable aliment. turnover
Vegetable food constitutes the
Nourishment of the greatest part
of mankind. Whole nations live
on Rice - Indian corn - and on

There are various methods of prepa-
-ring Vegetables for use. The fruits
are eaten raw & the are most
wholsome before dinner. The seeds
of the principal part
and roots of the roots are most
wholsome and nutritious after they
partake of the action of fire, and the
more they partake of it (provided they retain the
& texture) all over Alimentative qualities
of vices) the more easily they are digested. To this there
is but one exception - viz Cabbage. It digests most
easily when moderately boiled. go to p: 26 #12 v 15.

+ Eggs likewise constitute a
material part of the diet of some
countries. They are, like milk of a
compound nature. The yolk is of
an animal - the white of a vege-
-table nature. They are known to be
sound, by one end of them imparting
a sense of warmth to the tongue. The
Bread: Dr Corvisart in his Lectures

certain roots kind. The Cerealia contain flour of the greatest

and fruits of different Ch. W.
kinds, or those seeds which nourishment
afford the ~~nourishment~~
part of mankind.

It belongs to the materia medica to dilate fully upon this Subject

Besides Animals and Vegetables
there is a substance which ~~composes~~ constitutes
the food of Animal Nations, and of
every Individual those comes into
the world for the first year or 15 Months
life — This substance is Milk. It
consists of 3 parts — Cream — Whey —
& Cheese — The Cream is the vegetable
— the Cheese the animal part of the
milk. Cows afford the most nourishment
with both agreeing a
No 15 # milk when fed on
a little grain, & well rubbed & exercised.

98 to p: 26 of

they on Instinct ~~Instinct~~ as the Yolk under equal ~~The Stomach~~ patrifies white - & hence infers that proper healthy, when ~~undigested~~ with all ~~digestible~~ ~~spirit~~ ~~to~~ contain they are cooked by a heat ~~Boiling Point. Thus~~ ~~water~~ ~~as~~ ~~first~~ Point. How? return to p 600 — ~~&~~ ~~with which~~ ~~an~~ diluted and washed down his food into his stomach - But in

has proved that circumstances favour that the yolk is most alone Eggs are most ~~boiled~~. Presumed by Oil below the boiling ~~Liquor~~ Animal

every Age and Country Substitutes of a more cordial nature have been sought for by Man. The juice of the grape - fermented

at Beer obtained ~~by~~ from Barley & other grains - and above all Ardent Spirits have been most commonly used in all parts of the World. - Where these could not be obtained a Liquor obtained from Indian corn fermented with human Saliva - a Spirit obtained from mare's milk - and even goat's blood have all been preferred to

and vegetable food - we use a large quantity of certain substances called condiments. These are - being in pickles - spices - ketchups - sauces - pastes - tard - horseradish - &c Oeconomy. V

Turn over p. 26, 27 & 28 of Lectures on Animal afterwards V

The food when received into the mouth is divided by means of the teeth. There are happily contrived for the purposes not only of dividing, but triturating the aliment. It is moistened by the saliva which is poured forth by means of the parotid, submaxillary & sublingual glands. The tongue serves the important purpose of moving the food into such parts of the mouth,

simple water. But after all, water
has maintained its character for
greater Salubrity than either of them.
may - more it has retained its charac-
- ter for the pleasure it imparts to our
in point of the
taste in the pure State of the System.
Above all the liquors which have
been mentioned, are we thirsty?
Nothing but water can allay our
thirst or are we Scorched with a
fever? nothing but water can cool
our tongues. Have we been intox-
=icated or fatiated with Wine - Beer or
only can
Spirits? nothing but water compose
the clamors of our angry & disgusted
Stomachs? go to p: 26 - of h 015

as to favour the action of the teeth upon it. It afterwards protrudes it into the fauces from whence it passes to the tonsils and Velum palati and Epiglottis assisted by the action of a greater number of small muscles into the Oesophagus - into the Stomach where it undergoes the process of Digestion.

Man is the creature of habit, and as he was intended to live every where he is happily accommodated by the nature of his appetite and stomach to live upon any kind of aliment varied in its origin - preparation & mixture into an almost infinite variety of ways. There is no food

a Carnivorous, Herbivorous or Granivorous animal, but an Omnivorous animal.

If any beast but what man ~~can~~ has both eaten and even preferred. He has in the shape of Tartar thrusted his teeth into the Jugular veins of the Goat, and ~~drank~~ drunken a plentiful meal from his blood. Many ~~nations~~ nations of Savages live upon raw flesh. ~~Whole~~ Whole nations many upon fish only - The Patagonians live wholly on horse flesh. But further - The variety of taste in Man has led him to feed with a relish upon the food of wild birds & beasts of prey. In the transactions of the Society of Philadelphians at Hispaniola, there is an Account of several negroes who Dug up putrid Animals,

~~11~~ All aliment is nourishing in proportion

1 to its Quantity of Sugar 2 its oil.
or glutinous matter. 3 its mucilage ^ ~~Coffee~~ an
ounce of Sugar contains the greatest
Quantity of nourishment in it, than
the same quantity of any other
aliment. The Fruits & vegetables
of all kinds are nourishing in pro-
portion to the quantity of Sugar they
contain. The Sugar Cane - Dates & figs
& Raisons constitute ~~Love often eat~~ in many
a pleasant & wholesome
countries the ~~principal~~ part of the
nourishment of man. The Parsnip
Carrot - & Beet contain more Sugar
than the potatoes & hence they afford
in a given quantity more nourishment..

and fed voraciously upon it. ~~This~~

The same Variety of appetite and disp.
to habit
-sition appears in the facility with the
which Our
Species ~~for~~ accommodate to different

kinds of Vegetable food. The Persians
& Other fruits -
live wholly upon Dates - The Arabians
upon Apples - Goats milk & water. &c
Tournefort tells us that many of
the inhabitants of Constantinople live
during the summer on nothing but
Cucumbers. This versatility of
Appetite however is not confined wholly
to the human Species. Spalanzani
tells us that he taught an Eagle
to eat bread, and a pidgeon to
eat Animal food. V

This has been demonstrated by an experiment. Two pigs of the same age were weighed, ~~and~~ on a certain day. The one was fed on parsnips- the other on potatoes. At the end of a month, the one that was fed on parsnips had gained many ounces more of weight than the one that was fed on potatoes. — But 2 oz Oil whether vegetable or Animal constitutes the second grade of nourishment in Aliment. The Oil of Olives, & almonds affords nourishment to a great part of the Inhabitants of the Eastern Countries. A pound of fat meat of any kind affords more nourishment than 4 oz of lean meat — Pork ~~peas~~

There have been many disputes as to the times of eating among men. Some animals eat but once a day as the Eagle. 30 Ounces of flesh serves him for 24 hours. Some Animals eat always - as the Horse.

Which of the practices of these two Animals is most natural to Man? I answer the practice of the Horse, & that for the following reasons. 1 Children eat always. In them the system grows out of the language of reason and health, for as yet they are uncorrupted by the Customs of civilized life. 2 The

is more nourishing than
its ~~containing~~ more fat than Beef
from its containing ~~a good deal~~ more fat, or
animal Oil, & hence it is preferred
as the most frugal aliment for
Labourers, and persons who work at
Iron works, & the like. — 3.ly Glutinous
or mucilaginous matters, contain
2 3 a small quantity of food is thrown
out of the stomach with much ease
than a large quantity, & in a
much shorter time, the smallest
quantity of nourishment (in a given quantity
of matter. ~~Be~~ all the different grains
, roots, & many of the fruits abound
with this mucilage or Gluten. It
is because they afford so little
nourishment in proportion to
this quantity of matter, that

Indians when they assemble with pro-
=visions have no set times to eat.
but they their jaws are seldom idle.
Mr Bartram tells us that they some=
=times rise to eat in the night, and
he adds that it is because they eat
so constantly, that they have got the
credit of being so temperate when
among civilized nations,
they are invited to public feasts, for
the they seldom set down to a meal w:
an empty stomach. V 4 The
constant action of a small quantity
of food in the stomach is more
favourable to the equable Circulation,
of the blood
and the equable excitement of the
nervous system and of course to

we are able to eat so much more
of them, than we are of animal
V I respect the inordinate & universal
use of spirits - Tobacco [see p: 3] food
or of simple sugar. — The more
we are not to dispose the
sugar, or oil they contain blended with
their glutinous matter, the more
nourishment they afford. This
in vegetables
glutinous matter may be developed,
by certain Chemical processes. to we
obtain it from wheat & potatoes by
form
means of starch. — go to p: 32 —

good health, than the alternate
~~Stimulo~~ languor and excitement which follows
an empty Stomach, & a plentiful
Meal. V — However salutary this
simple & natural mode of eating
may be, the business, - duties, - and
necessities of adult and civilized
life, have made it necessary to submit
to regular meals. It remains then
only to decide, - how can these be
divided to the best advantage. Jan-
-swer by adhering as nearly as possible
to the dictates of nature, and taking
three or four meals a day. The
heavy and Animal part of our
food is usually taken in the

middle of the day, — but this is by
no means proper, — for the labor or
study which follow it are very hurtful
to digestion as I shall say hereafter.
— The principal meal should always
be made in the evening After the
business of the day is over. It is then
the body enjoys most rest, and it is
then the mind is most free from
& distracting ^ stimulli of business & a cheerful
care, and the mind as I shall say
hereafter ^ powerfully acts upon the stomach in
promoting digestion. The evening is
moreover more ~~agreeable~~ suited to the pleasures
of Society. The Romans understood
this the truth of all the facts that
have been mentioned — hence this

v This has been ascertained very accurately in many animals. 29. An Elephant which belonged to the King of the two Sicilies eat 100 of Straw - one loaf of bread - and two or three aromatic balls every day. W.th These he drank 200 gallons of water every day in summer & 100 in winter. A horse will not preserve his flesh upon less than It is more difficult to ascertain what quantity of hay in a day. The tyger 30 lbs. of flesh. — Of these species! 6 lbs of water. He had very fetid stools. —

+ and all men require more food, and liquids in winter than in summer.

principal meal was always in the evening?

⊙ What Quantity of Aliment is proper in the Course of a day? ^V It must be different according to the age and employment of individuals. a Child requires more in proportion to its Size than an adult, than and an Old man requires more than a middleaged man, for food is One of the Stimuli which supports Old age + Laboring people moreover require more than those who lead indolent lives. + The Quantity of food should be regulated by its Quality - for half the Quantity of animal food

V The Chinese on Uij of Rice. –

will go further than double the quan=
=tity of vegetable — and half the quantity
common
of sugar will impart more strength &
nourishment than the double the
quantity of animal food. — Of the
common food which we take every
day, 48 including artificial liquors
(which all contain nourishment) are
said to be necessary for a healthy —
active — or laboring man. But
few
men require this quantity. The Turks
according to Volney enjoy good health
upon only 16 of aliment and this
of the most insipid vegetable nature.
From 24 to 36 I believe would be
sufficient for most men. Habit

v Perhaps ~~eating~~ is as necessary to
the body
nourish the air to support the action
of the system by its constant stimu-
=lus upon every part of the body thro'
the medium of the stomach. If this
be admitted, a few ounces of food of a
solid insoluble & stimulating qua-
=lity will support animal life in
comfortable circumstances more
than as many pounds of more
nourishing, but ~~and~~ less stimulating
the absence of the stimulus
food. That it is the case, I infer from ~~its~~ of
living so often supplied by other stimuli. Eg a
Stimulus
a fever which depends on ~~Excess~~
producing excess of action in the arterial
system, and of course sufficient action
~~and diseases food voluntary~~
in all parts of the body, renders the

will make that quantity agreeable,
and it is habit only that makes more
necessary. ~~If~~ One rule of great consequence
never to eat - if you Deliberate whether you shall eat
or not - Divide - ag[t] your Appetite -
These have been many disputes
whether man should take his food
hot or cold. It is peculiar to the
human Species only to eat warm food.
It is certainly more savoury in
this State. Habit soon makes it
wholly inoffensive if it was originally
contrary to nature - but I am
disposed to believe that this is not
the case. The Indians prefer warm
to cold food. ~~The~~ When taken cold
it soon acquires the temperature
of the Stomach, and it is seldom

Stimulus of aliment wholly unnecessary.
so have persons live many days & even
weeks in a state without taking an ounce
of nourishment. The same may be
said of other Stimuli - particularly
of the Contagions - they supply (as I
know from experience) the stimulus
of food on the System - thinking,
& the stimulus of violent, but
temporary bodily exertion have the
same effect. But there are many instances
of life being supported by Substances which
act by their Stimulus only in the stomach
without any nourishing matter in them.
Several of them were mentioned in the
Lectures on Animal life. Baron Humboldt
related a fact of a tribe of Indians of S. America
living for 3 months on Clay with
a small Quantity of Rice. Dusing & Jamieson
mentions likewise another tribe living chiefly on
Resins. But

tatum so Lost as to be beyond the
temperature of the body. — ~~wh~~ Where
it is, the ~~fla~~ tongue - mouth - and
stomach soon lose ~~their~~ from habit
their sensibility to it. go to p. ~~[illegible]~~ 13 & 15

Q Is it proper to drink ~~frequently~~
frequently or much
~~or much~~ during the time ~~of~~ our meals?

— I answer — no — and that for
the following reasons — 1 drinking
frequently ~~dilutes~~ dilutes our appetite,
if the liquor be weak, & increases
it if the liquor be strong, such as Wine
both of which should be avoided
at our meals. & 2 A large quan-
tity of liquor washes the food out
of the stomach before it is completely

of Wood & Resin serve the same purpose in certain hybernating Animals. go to p: 612

Observing in using nourishing matters for Drinks - Innocent Distinction - Why we go in anger?

For the same reason that I condemn Drinking frequently at our meals, I condemn the Absurd practice of Drinking Wine & bitters before dinner.

Both of which are nourished originally by Vegetables. These are composed of Air & water, — to ¼ Air & water are the foundation of all the aliment of all the animals in the World.

digested. Impurities should al=
=ways drink, till they have finished
their meal. There is a more intri=
=mate connection with health
=mate connection with this practice
than is generally imagined. ✝

The same Objections apply to our
taking wine and bitters, or to
drinking before our meals. The indi=
=viduals avoid this practice with the ut=
=most care.

On what does appetite depend?

Dr Boerhaave supposes the action of the
internal coat of the stomach on itself, 2ly
on the effusion of bile & the stimulus of
the gastric juice on the stomach, & 3ly
on the reliquia of the last meal sti=
=mulating the stomach. I grant these
vitiated
may be a morbid appetite from bile

v upon each other, | ness by the nervous
of food left in it.

this point is
V Dr Haviston supposes y ~~it depends~~ connected with a peculiar Sympathy
of the whole System with the Stomach,
~~y the retrocedent~~ invites a certain
calling for a recruit of its wasted materials.
~~degree of excitement in the stomach.~~
* It is possible the gastric juice may
act upon it ~~so~~ in this State, and
occasion the sensation of hunger. If
~~the appetite~~ hunger be not gratified, at its
ordinary, & customary hour, it ceases
~~to~~ for a while to give us any
pain - nay more, we lose our appetite

~~or gastric juice~~ stimulating stomach, but also from tape worm

natural
hunger I believe is not excited by ~~it~~ the
~~nor yet by~~ the attrition of the parietes of the stomach
~~of them~~. Vesalius tells us that he once

dissected a robber who had been noted

for his gluttony, in whom the gall

bladder emptied itself by the Ductus

communis directly into the stomach.

The bile here was probably the cause

of his preternatural appetite. But

in ordinary cases ~~the~~ appetite is

excited when the stomach is empty

and relaxed to a certain degree which

I shall call the hungry point. When

the relaxation descends below the
hungry
point, anorexia or want of appetite

takes place —. ~~It~~ It is removed only

by exciting the stomach, & raising

for a while altogether. This may be induced by one of two causes. 1 A relaxation of the stomach below the point of hunger, or

2 It may arise from a reaction of the stomach to overcome the stimulus of the Gastric Juice. This victory however of the stomach is generally short lived. It soon sinks into relaxation again when hunger returns with more violence. There is a curious fact connected with this disease. The stomach of a person who dies of this yellow fever which shows the influence of the latter part. The stomach of a person who dies of this disease, in this yellow fever, towards the close of it, we sometimes observe a vascularity of the patient's stomach retaining life and to react upon the Gastric Juice, but if it does not go off in a day or two, the patient dies, owing probably to its vital functions being impaired beyond the point of reaction.

it up to the point of hunger. I should it be asked why is a certain definite degree of relaxation attended with the sensation of hunger — I answer that it must resolved into the same will the Deity which connected pain and pleasure with certain degrees of relax=ation in other parts of the system.

The sensation of hunger is when it is carried to a certain height a most acute & distressing one. It vitiates the taste. It changes the temper — it affects the moral faculties — it is said to break the bonds of the heart, — it has even driven women to kill & eat their own children — But this is not all and finally it has

V The sense of hunger is suspended by such things as elevate the stomach above the hungry point. These are Opium — Tobacco, and the odor of certain Aliments, while those Stimuli which raise it to the hungry point create or invigorate the Appetite. These are moderate joy — mountain Air & gentle exercise —. The effects of Joy appear in the Appetite excited by agreeable convivial society. Sometimes the sense of hunger is suspended by the Stimulus which induces it being overpowered by other Stimuli particularly great exertions of the understanding. Lord Mansfield felt neither hunger nor thirst while he sat upon the bench during the longest trials. One Reason why Judges are often afflicted with the gravel & stone is because the exercises of their mind prevent their feeling the Stimulus of their Urine — turn over to No: 618. +

led Men to feed upon their own flesh.
It has
after Shipwrecks, Sailors have often been
taken up who have known their own
Shoulders for Subsistance. —

That a certain degree of relaxation in
the stomach is the ordinary cause of hunger, Dinger
from the effect of certain passions upon
it. It is suddenly suspended by grief-
fear - Shame & the like. Now those
act by inducing debility below the
Hungry point ~~and cannot be supposed to act on any fluid~~
~~in the Stomach.~~ They resemble those
directly debilitating causes I formerly
mentioned which prevent Sleep by
inducing the System below the point
of Sleep. Again - ~~The Appetite is often~~
~~invigorated by Exercise, &c. How we~~
~~eat with pleasure is inexplicable~~

~~It~~ Diseased mentioned by Percival. Robust & young persons
sooner by it. ~~Old~~ Endured longest after vegetable aliment.

~~It~~ It is possible after a certain time the
gastric or some other juice of the stomach may
by ~~its absorbed~~ becoming morbid ~~by some~~ stimu-
-late the Stomach, & thus increase the sense of hunger.
~~It is~~ It is remarkable that hunger produces
uncommon excitability of system - and y.
eating a large meal: after long fasting
But further - even a
has often induced sudden Death. The
famous poet Otway died immediately
after eating a loaf of bread after fasting
But further - over a small meal changes the system after long
fasting. Oysters intoxicates Capt Bligh - veal broth a young Dr. died
for several days. Hunger is greatly increased
by Oxygen - and by high & dry situations - mountains.
Hunger may be suspended or satisfied
by Opium - Tobacco - and many other stimulants
which raise the stomach above y^e hungry
point. also by smelling food too long -
hence we eat most at simple meals, or
when only a little set before us at
a time. Hunger may further be
suspended by any thing that powerfully
affects the passions or understanding. One

company, when we can not relish food
if we sit down to our tables alone. Fur=
=ther further, that the cause I have assigned
is the principal One — from the effect of
a ~~loose~~ and gentle exercise in
~~restoring~~ ~~on causing~~ ~~the appetite~~
& from the effect of ~~a~~ upon all those
causes which impair it (to be men=
=tioned hereafter) all of which act by
~~subduing the appetite below~~, or raising it
to light ~~(as to indue~~ above the hungry ~~happily~~ point.
Where is the Seat - and
What is the cause of thirst? Its
& throat.
Seat I believe is in the fauces. I infer this
from its being allayed frequently by
sucking certain sour ~~Lemon~~ fruits, or by
only
washing the mouth with cold water.
Its causes are ~~from~~ & certain dessimmary

stimulus like overcomes another. I have in my letters on Animal Life supposed that the sense of hunger was more when he connected fare to take with his meals or moment first ate, was suspended wholly by the powerful & delightful sense of the Divine presence upon his mind. — Mentioned formerly that Lord Mansfield felt neither hunger, nor thirst in the tryal of the longest cause. — Indeed do not feel stimulus of Urine from the same cause Capt. Bligh felt no thirst, nor hunger in his long and Dangerous Voyage while his men were by suffering most exquisitely from both. — This relaxation becomes the invigorating cause of a certain degree of excitement.

#Hunger is suspended in certain Animals by balls of moss & Rosin during the Winter. For the Spring they are voided wholly.

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p. 109

stimulating the vessels of the fauces. This
Animony may depend upon either general or
partial. It is general in fevers - and
in those cases in which there is long
Abstinence from drinking Drinks - or when
Animony has been retained in the
blood by a suppression of Urine. It is par-
-ticul when it is excited by salt meat,
or any acid or saline substance which acts upon the
fauces - a 2nd Cause of thirst is relaxation
or a certain state of debility
of the fauces in the
respects of the fauces which may be called
by the thirty point. This occurs frequently
in the hosts from artificial causes particularly
fear. all men feel it more or less be-
-fore and during the time of battle. 2 from
Opium pain - which induces in time
thirst. After it induces Depression of the System.
indirect debility.

V The more completely it is thus divided, the easier it is digested. 45 grs. of flesh well masticated in the usual time of digestion 18 of the former were dissolved & but 4 of the latter. Spalanzani. Lee Comm: Science book. p. 32 for excellent remarks on the teeth. next year. —

- in this case small bones were likewise swallowed. 45 grains not mast?

3 Iron Opium - Digitalis - and many
other narcotic substances which do not
act on the ~~bowels~~ senses. They produce
thirst only when ~~they~~ ~~Vomit~~ ~~Diuretics~~ they
debilitate, or reduce the system to a thirsty
point. — Lect. 25

The food before it is received into the stomach
is first divided by means of the teeth.
These are happily contrived, not only
for the purpose of dividing, but of tri-
turating the aliment. V It is moistned
by the Saliva which is poured forth by
means of the process of mastication
in proportion as it is required, from
the parotid - the sublingual - & maxillary
glands. — The tongue serves the important
purpose of moving the food into